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# **Descriptions of 11 Proposed Sites and 15 Final Sites Added to the National Priorities List in July 1999**

Office of Emergency and Remedial Response  
State & Site Identification Center (5204G)

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This document consists of descriptions of the 11 proposed sites and 15 final sites added to the National Priorities List (NPL) in April 1999. The size of the site is generally indicated, based on information available at the time the site was scored using the Hazard Ranking System (HRS). The size may change as additional information is gathered on the sources and extent of contamination. Sites are grouped according to proposed or final status, and are arranged alphabetically by site name within those groups.

## **CLEANING UP UNDER SUPERFUND**

The Superfund program is managed by the U.S. Environmental Protection Agency (EPA). It is authorized by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), enacted on December 11, 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA), enacted on October 17, 1986. In October 1990, SARA was extended to September 30, 1994. An appropriation by Congress for Fiscal Year 1995 authorized Superfund to continue to operate. The Hazardous Substance Response Trust Fund set up by CERCLA as amended pays the costs not assumed by responsible parties for cleaning up hazardous waste sites or emergencies that threaten public health, welfare, or the environment; Superfund also pays for overseeing responsible parties conducting cleanup.

Two types of responses may be taken when a hazardous substance is released, or threatens to be released, into the environment:

- **Removal actions -- emergency-type responses to imminent threats.** SARA limits these actions to 1 year and/or \$2 million, with a waiver possible if the actions are consistent with remedial responses. Removal actions can be undertaken by the private parties responsible for the releases or by the Federal government using the Superfund.
- **Remedial responses -- actions intended to provide permanent solutions at uncontrolled**

**hazardous waste sites.** Remedial responses are generally longer-term and more expensive than removals. A Superfund-financed remedial response can be taken only if a site is on the NPL. EPA published the first NPL in September 1983. The list must be updated at least annually.

EPA's goals for the Superfund program are to:

- Ensure that polluters pay to clean up the problems they created; and
- Work first on the worst problems at the worst sites, by making sites safe, making sites clean, and bringing new technology to bear on the problem.

## **REMEDIAL RESPONSES**

The money for conducting a remedial response at a hazardous waste site and a removal action, as well, can come from several sources:

- The individuals or companies responsible for the problems can clean up voluntarily with EPA or State supervision, or they can be forced to clean up by Federal or State legal action.

- A State or local government can choose to assume the responsibility to clean up without Federal dollars.
- Superfund can pay for the cleanup, then seek to recover the costs from the responsible party or parties.

A remedial response, as defined by the National Oil and Hazardous Substances Pollution Contingency Plan, the Federal regulation by which Superfund is implemented, is an orderly process that generally involves the following steps:

- Take any measures needed to stabilize conditions, which might involve, for example, fencing the site or removing above-ground drums or bulk tanks.
- Undertake initial planning activities to scope out a strategy for collecting information and analyzing alternative cleanup approaches.
- Conduct a remedial investigation to characterize the type and extent of contamination at the site and to assess the risks posed by that contamination.
- Conduct a feasibility study to analyze various cleanup alternatives. The feasibility study is often conducted concurrently with the remedial investigation as one project. Typically, the two together take from 18 to 24 months to complete and cost approximately \$1.3 million.
- Select the cleanup alternative that:
  - Protects human health and the environment;
  - Complies with Federal and State requirements that are applicable or relevant and appropriate;
  - Uses permanent solutions and alternative treatment technologies or resource recovery technology to the maximum extent practicable;
  - Considers views of the State and public; and
  - Is "cost effective" -- that is, affords results proportional to the costs of the remedy.

- Design the remedy. Typically, the design phase takes 6 to 12 months to complete and costs approximately \$1.5 million.
- Implement the remedy, which might involve, for example, constructing facilities to treat ground water or removing contaminants to a safe disposal area away from the site.

EPA expects the implementation (remedial action) phase to average out at about \$25 million per site (plus any costs to operate and maintain the action), and some remedial actions may take several years to complete.

The State government can participate in a remedial response under Superfund in one of two ways:

- The State can take the lead role under a cooperative agreement, which is much like a grant in that Federal dollars are transferred to the State. The State then develops a workplan, schedule, and budget, contracts for any services it needs, and is responsible for making sure that all the conditions in the cooperative agreement are met. In contrast to a grant, EPA continues to be substantially involved and monitors the State's progress throughout the project.
- EPA can take the lead under a Superfund State Contract, with the State's role outlined. EPA, generally using contractor support, manages work early in the planning process. In the later design and implementation phases, contractors do the work under the supervision of the U.S. Army Corps of Engineers. Under both arrangements, the State must share in the cost of the implementation phase of cleanup.

## **National Priorities List Proposed Rule #29 Narrative Summaries**

### **Site Name and Location**

Basin Mining Area, Basin, Montana

Fruit Avenue Plume, Albuquerque, New Mexico

Garland Creosoting, Longview, Texas

Iceland Coin Laundry Area Ground Water Plume, Vineland, New Jersey

Jacobs Smelter, Stockton, Utah

Lightman Drum Company, Winslow Township, New Jersey

McGuire Air Force Base #1, Wrightstown, New Jersey

Old Wilmington Road Ground Water Contamination, Sadsburyville, Pennsylvania

Star Lake Canal, Port Neches, Texas

State Road 114 Ground Water Plume, Levelland, Texas

Upper Tenmile Creek Mining Area, Lewis & Clark County, Montana

## **National Priorities List Final Rule #25 Narrative Summaries**

### **Site Name and Location**

Alameda Naval Air Station, Alameda, California

Eastland Woolen Mill, Corinna, Maine

Emmell's Septic Landfill, Galloway Township, New Jersey

Former Nansemond Ordnance Depot, Suffolk, Virginia

Hanlin-Allied-Olin, Moundsville, West Virginia

Hart Creosoting Company, Jasper, Texas

Hudson Refinery, Cushing, Oklahoma

Kim-Stan Landfill, Selma, Virginia

Martin Aaron, Inc., Camden, New Jersey

Mountain Pine Pressure Treating, Inc., Plainview, Arkansas

Norfolk Naval Shipyard, Portsmouth, Virginia

North Belmont PCE, North Belmont, North Carolina

United States Avenue Burn, Gibbsboro, New Jersey

Vasquez Boulevard and I-70, Denver, Colorado

Vega Baja Solid Waste Disposal, Vega Baja, Puerto Rico

**BASIN MINING AREA  
Basin, Montana**

The Basin Mining Area site is located within the Boulder River watershed, and consists of uncontained mine tailings piles and areas of soil contamination resulting from precious metal mining activities. Mining activities included hard rock mines where veins of quartz, tourmaline, pyrite, galena, tetrahedrite, sphalerite, arsenopyrite, chalcopyrite, and siderite within the Cretaceous Boulder Batholith were explored. Tailings piles are located along Basin and Cataract Creeks and within and adjacent to the Basin town limits. The Town of Basin is situated near the confluence of the Boulder River and Basin Creek. Mining activities in the Basin Mining Area commenced in the late 1800s and continued intermittently into the 1960s. Metals extraction included milling and smelting of ore within the Town of Basin.

The Basin Mining Area includes: Bullion Mine, Buckeye-Enterprise Mine-Mill, Crystal Mine, Boulder Chief Mine, Eva May Mine, Basin Tailings, Jib Tailings, and contaminated soil.

A Montana Bureau of Mines and Geology, Abandoned-Inactive Mines (MBMG AIM) report indicated that the Bullion mine and Buckeye-Enterprise mine in the Basin Creek drainage, and the Crystal mine in the Cataract Creek drainage appear to be major contributors to the dissolved-metals loading in the creeks. The group of mines in the Jack Creek drainage were noted as having the greatest individual and collective impact of any other in the Basin Mining Area. The samples collected from Basin Creek below all of the sampled mines had elevated arsenic concentrations; the MBMG AIM program report indicated possible entrance of ground water and sediments via the Basin Belle or Daily West mines.

EPA conducted a Screening Site Inspection (SSI) in 1989 and in 1991, conducted an Expanded Site Inspection. EPA also sampled in the environs of the Basin School in January of 1990, and the Montana Department of Health and Environmental Sciences sampled the Basin School Yard soils in April and June of 1990. Samples collected during the 1989 SSI from tailings piles located in and around Basin revealed elevated levels of arsenic, cadmium, copper, lead, manganese, mercury, silver and zinc in the uncontained sources. Samples of surface soil showed contamination on residential properties within the Town of Basin. Arsenic was detected in surface soil samples collected from the Basin School playground area at concentrations exceeding the cancer risk level. Basin School officials were advised by the Montana Health Department to restrict student access to documented and suspected areas of contamination on the school's property.

Surface water and sediment samples collected during the 1989 SSI indicated that hazardous substances attributable to the site, specifically arsenic, copper, lead, silver and zinc, were being released from site sources to the Boulder River. Surface water and sediment samples collected during the 1993-1994 Montana Department of State Lands, Abandoned Mine Reclamation Bureau indicated that hazardous substances attributable to the mines, specifically arsenic, cadmium, copper, iron, lead, manganese, mercury, silver, antimony, and zinc in uncontained sources within the Basin Mining Area were being released to surface water. The MBMG AIM samples identified elevated levels of arsenic, cadmium, copper, lead, and zinc in samples collected during their study.

The Boulder River, Basin Creek, and Cataract Creek transect the Basin Mining Area site and are documented recreational fisheries. The State of Montana has classified the Boulder River and Cataract Creek as level B-1 surface water bodies for drinking, culinary, and food processing purposes after conventional treatment. The Basin Creek drainage has been classified by the State of Montana as an A-1 surface water body.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**FRUIT AVENUE PLUME  
Albuquerque, New Mexico**

The Fruit Avenue Plume site consists of a plume of trichloroethylene-contaminated ground water in the aquifer underlying downtown Albuquerque, Bernalillo County, New Mexico. Despite extensive efforts by the New Mexico Environment Department (NMED) over the past 9 years, the source of the ground water contamination has yet to be identified.

In April 1989, contamination was detected in a Coca-Cola Bottling Plant well during routine compliance sampling by the City of Albuquerque Environmental Health Department (CAEHD). Trichloroethylene (TCE) was detected at a level of 14.5 micrograms per liter ( $\mu\text{g/l}$ ), 9.5  $\mu\text{g/l}$  above the maximum contaminant level (MCL) of trichloroethylene in drinking water of 5  $\mu\text{g/l}$ . Subsequent sampling of the well in July 1989 indicated the presence of TCE at 13.1  $\mu\text{g/l}$ . Based on these results and a recommendation from CAEHD, the Coca-Cola Bottling Company discontinued use of the well in July 1989.

In response to the discovery of TCE contamination, NMED initiated a Preliminary Assessment in December 1989 of the area surrounding the Coca-Cola Bottling Plant well. NMED identified five potential sources of the ground water contamination in the downtown Albuquerque area. Subsequent investigations were conducted from 1990 to 1998 to identify the source of the contamination and assess ground water conditions. These investigations included collection and analysis of subsurface soil samples, installation of ground water monitoring wells, and collection and analysis of ground water samples. TCE and a related substance, tetrachloroethylene (PCE), were detected in numerous ground water samples within the area of the plume. Though potential sources of contamination were identified during these investigations, the information collected to date has not been adequate to directly attribute the contamination to one or more of these sources.

In the absence of a specific source of contamination, the Fruit Avenue Plume site has been identified as a plume of contaminated ground water that includes 14 monitoring wells and a closed, private water supply well at which significant levels of contamination have been detected. These 15 wells are located approximately 2 miles east of the Rio Grande River in downtown Albuquerque. The area is approximately bounded by Fruit Avenue to the north, Elm Street to the east, Tijeras/Martin Luther King Avenue to the south, and 4<sup>th</sup> Street to the west. The 15 wells are located in the Santa Fe Group aquifer, which includes hydraulically connected alluvial fan deposits and valley alluvium in the Albuquerque area. The maximum concentration of TCE detected within the plume to date is 76  $\mu\text{g/l}$ , more than 15 times the 5  $\mu\text{g/l}$  MCL. The maximum concentration of PCE detected within the plume is 15  $\mu\text{g/l}$ , 10  $\mu\text{g/l}$  above the MCL for PCE of 5  $\mu\text{g/l}$ .

The City of Albuquerque relies on water withdrawn from the Santa Fe Group aquifer for its sole source of drinking water. New Mexico and the Albuquerque Basin have long histories of imbalance between water needs and availability. The climate is such that naturally occurring surface water supplies are not dependable. As such, ground water is the primary source of water for urban, rural, commercial, and industrial uses in the Albuquerque Basin. Albuquerque operates 88 ground water supply wells providing drinking water to more than 400,000 individuals. Thirty-six of these wells are completed in the Santa Fe Group aquifer within 4 miles of the site. An active private well is also completed in the aquifer within this distance. Combined, public and private wells within 4 miles of the site supply the needs of close to 200,000 individuals. Contamination has not been detected in these wells to date.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**GARLAND CREOSOTING**  
**Longview, Texas**

The Garland Creosoting site is located in Gregg County, Longview, Texas, and encompasses the approximately 12-acre property formerly used by the Garland Creosoting Company for the manufacture of creosote-treated wood products. Garland Creosoting Company began wood treating operations at the facility in 1960 and filed for Chapter 7 bankruptcy in February 1997. Investigations conducted while the facility was operational and subsequent to its closure indicate that hazardous substances used in the wood treating process have contaminated on-site soil, ground water underlying the site, and nearby surface waters.

Prior to 1985, wastewater generated by the Garland Creosoting facility system was treated and discharged to five surface impoundments to allow evaporation. Bottom sludges created in the surface impoundments are classified as a hazardous waste under the Resource Conservation and Recovery Act (RCRA). Reportedly, the facility discontinued use of the surface impoundments in 1985 and diverted treated wastewater to the City of Longview wastewater collection and treatment system. A sixth surface impoundment was used at the facility to contain wastewater in the event of a spill from the process area or wastewater treatment plant.

In May 1986, Garland Creosoting decided to close the five surface impoundments used as wastewater evaporation ponds. A subsurface investigation indicated that the ground water in the vicinity of the impoundments was contaminated, and 12 ground water monitoring wells were installed. In November 1989, the five surface impoundments were capped, leaving the creosote contaminated sludge and soil in place. In June 1990, the facility was issued a post-closure care permit for the impoundments requiring that Garland Creosoting install, operate, and monitor a ground water recovery system to address the contamination. A ground water collection trench was installed to intercept free creosote product and creosote-contaminated ground water. The trench drained into a sump from which the recovered ground water was pumped to the wastewater treatment system and, following treatment, discharged into the City of Longview system. During operation of the system, the facility reported the presence of free creosote product in some of the monitoring wells and ground water contamination by creosote-related substances.

In May 1997, following Garland Creosoting's bankruptcy filing, TNRCC inspected the facility. The inspection revealed that the ground water treatment system had ceased operation and a dark oily substance was observed flowing downhill from the ground water collection trench sump into an intermittent creek running along the southern border of the site. TNRCC inspectors observed a 1,400-square-foot area of soil saturated with creosote between the sump and the intermittent creek. Stressed vegetation, stained soil, and creosote seeps were noted along the bank of the intermittent creek. Ten 55-gallon drums with labels indicating hazardous wastes were found in an unlocked building. TNRCC initiated an emergency response action in May 1997 to abate ongoing discharges and stabilize the site.

The intermittent creek along which the stressed vegetation, stained soil, and creosote seeps were observed runs downstream approximately  $\frac{1}{3}$  mile where it meets the Iron Bridge Creek southwest of the site. Approximately  $1\frac{3}{4}$  miles downstream from its confluence with the intermittent creek, Iron Bridge Creek flows into the Sabine River. During a November 1997 TNRCC site visit, seven sediment samples were taken from the intermittent creek and Iron Bridge Creek. Analyses of these samples indicated the presence of polynuclear aromatic hydrocarbons (PAHs) and dibenzofuran, contaminants commonly associated with creosoting processes. PAHs and other creosote-related contaminants were detected in samples collected from the surface impoundments, ground water collection sump, and intermittent creek.

Both Iron Bridge Creek and Sabine River are actively fished for flathead catfish, blue catfish, white bass, channel catfish, crappie, large mouth bass, and spotted bass. According to the Texas Parks and Wildlife Department, these fish are primarily caught for human consumption. In addition, wetlands exist along the banks of Iron Bridge Creek and Sabine River throughout the 15-mile distance considered potentially susceptible to contamination from the site. The paddlefish, a listed endangered species in the State of Texas, inhabits the waters at the confluence of Sabine River and Iron Bridge Creek, and is also considered potentially susceptible to contamination from the site.

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**ICELAND COIN LAUNDRY AREA GROUND WATER PLUME  
Vineland, New Jersey**

The Iceland Coin Laundry Area Ground Water Plume site is an area of contaminated ground water located in a commercial/residential area of the City of Vineland, Cumberland County, New Jersey. Based on a review of analytical data from ground water samples collected in the area, the contaminated ground water plume area encompasses South Delsea Drive, Dirk Drive, Garrison Road, Lois Lane, South Orchard Road, West Elmer Road, and West Korff Drive.

On three occasions, between September 1987 and October 1990, ground water samples were collected from a drinking water well located at 1276 Garrison Road by the Vineland City Health Department. Analytical results from these samples indicated the presence of volatile organic compounds (VOCs) exceeding State and Federal Maximum Contaminant Levels (MCLs). Subsequently, the Vineland City Health Department collected drinking water well samples from 55 residences located in the area between December 1990 and September 1991. Analytical results from these sampling activities indicated the presence of VOCs, primarily tetrachloroethylene (PCE). PCE was detected above the State and Federal MCL in 16 of these 21 wells. Drinking water contamination is documented for 16 wells, which serve a total of approximately 44 people. Potable wells within 4 miles of the site, and drawing from the aquifer of concern, serve an approximate population of 28,770 people.

As a result of the private well contamination, the New Jersey Department of Environmental Protection (NJDEP) installed point of entry treatment units to the affected residences as a temporary remedial measure until public supply water mains could be extended to the area. Public supply water mains were extended to these areas in 1994. Currently, not all residences are connected to the public supply.

In 1995-1996, the NJDEP conducted an expanded site investigation at the former Iceland Coin Laundry and Dry Cleaning facility. This investigation included subsurface soil and ground water sampling. The results of soil sampling conducted in November 1995 showed PCE concentrations up to 8 micrograms per kilogram (ug/kg). Analytical results of ground water samples collected from on- and off-site direct push borings in November 1995 and May 1996 indicated PCE concentrations at concentrations up to 489 micrograms per liter (ug/L). The former Iceland Coin Laundry and Dry Cleaners facility contributes to the ground water contamination in the area. In addition, PCE was also detected in samples collected from areas not expected to be impacted by the Iceland facility, which may suggest the possibility of other sources contaminating the ground water.

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**JACOBS SMELTER  
Stockton, Utah**

The Jacobs Smelter site covers over three acres in northeast and southwest Stockton, Utah. In 1998, the Utah Department of Environmental Quality collected 29 soil and sediment samples from residential yards, fields, and former smelting locations in the Rush Lake area of Tooele County situated to the south of Tab Hill. These samples were collected to determine if a threat to human health existed in the area from historical smelting operations. Analysis of the soil and sediment samples indicated levels of arsenic and lead to be present at very high concentrations of 30,400 milligrams per kilogram (mg/kg) and 68,400 mg/kg, respectively. The discovery of these concentrations prompted the need to further investigate the extent of arsenic and lead present in soils in this region of the Rush Lake Valley.

Historically, the Rush Lake/Stockton area was a major smelting center for this part of Utah, receiving and milling ore from most of the mines in the valley. As many as nine smelters could have operated in the Rush Lake Valley, but only four have been positively located: the Waterman, Chicago, Carson-Buzzo, and the Jacobs. All operated in the study area from the 1860s through the turn of the century refining gold, silver, copper, lead, and zinc. The nearest of these smelters to the study area was the Jacobs Smelter.

Subsequent investigations were performed by the Bureau of Reclamation in conjunction with several government contractors. These investigations included the collection of a total of 5,296 surface soil samples from 252 parks, residences, and lots in Stockton. Using an X-Ray Fluorescence Spectrometer in the field, the majority of samples were found to contain concentrations of arsenic above the analytical target level of 100 mg/kg, or the lead analytical target level of 400 mg/kg. Samples were sent for laboratory confirmation, and the data resulting from the laboratory analysis were used to delineate an area of observed arsenic contamination in surface soils encompassing at least three acres.

An evaluation of residences within the area of observed soil contamination indicates that there are an estimated 62 residences subject to arsenic concentrations exceeding the Cancer Risk Screening Concentration, Health Based Benchmark. In addition, there are 18 residences on which a release of lead has been documented.

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**LIGHTMAN DRUM COMPANY  
Winslow Township, New Jersey**

The Lightman Drum Company site is located in Winslow Township, Camden County, New Jersey, along Route 73. Lightman Drum acquired the property in April 1974 and began recycling drums. Lightman Drum received drums, some full or partially full; which were emptied before they could be forwarded to an off-site location for cleaning. Initially, Lightman dug a pit at the rear of the property to discard the contents of any drum that arrived "heavy." This practice was discovered by an adjacent property owner, who contacted the New Jersey Department of Environmental Protection (NJDEP). A formal complaint was filed and Lightman was taken to court and ordered to line the pit or stop the practice.

The NJDEP continued to monitor operations at the site and in 1977, during a site inspection, discovered that Lightman had installed two 5,000-gallon underground storage tanks. Lightman applied for, and was granted, a Temporary Operating Authority (TOA) permit to receive and store specific special waste types prior to final disposition at an approved hazardous waste disposal facility. The facility was allowed to accept chemical powders, pesticides, waste oils, emulsions, oil sludges, paint, pigment, ink residues, ketones, alcohols, mixed solvents, acids and alkalis. The TOA was in effect for a period of one year, pending the approval of an engineering design for the facility. Under the TOA, Lightman consolidated chemical residues in the underground storage tanks, in drums, and in trailers. Numerous violations occurred during this period of operation, which led to the subsequent denial of Lightman's application to continue as a hazardous waste storage facility.

In an NJDEP 1987 sampling event and the resulting April 12, 1988 AO, the following contaminants were indicated as being present in site soils; 1,2,4-trichlorobenzene, tetrachlorethene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, bis(2-ethylhexyl)phthalate, butyl benzyl phthalate, di-n octyl phthalate, aroclor-1254, chromium, cadmium and lead.

Lightman was ordered to conduct a Remedial Investigation (RI) to determine the impact of the pollution on human health and the environment. Data collected during the investigation documented that a release of hazardous substances from the site to ground water had occurred as a result of operations of the Lightman Drum Company. Within four miles of the site, seven public supply wells and numerous private wells utilize the Kirkwood-Cohansey Aquifer (the contaminated aquifer) as a source of drinking water. Over 20,000 people using the aquifer for drinking water are potentially affected by the site.

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**MCGUIRE AIR FORCE BASE #1  
Wrightstown, New Jersey**

The McGuire Air Force Base #1 site (MAFB) is an active facility that occupies more than 3,500 acres in a rural area of Burlington County, New Jersey. The base is bordered to the north by the community of Wrightstown, and to the east, south, and west by the U.S. Army's Fort Dix military installation. MAFB is located within the boundaries of the Pinelands National Reserve. The Pinelands are classified as Federal Land designated for the Protection of Natural Ecosystems. The primary source for both community and private drinking water supplies in the vicinity of the site is ground water obtained from the various aquifers comprising the Atlantic Coastal Plain. There are two major drainage divides on site, and several streams to which surface runoff is directed. An extensive system of wetlands is found along both major surface water drainage pathways.

MAFB originated in 1937 as an adjunct to the U.S. Army Training Center at Fort Dix and functioned under control of the U.S. Army until 1948, when jurisdiction over the facility was transferred to the U.S. Air Force. Past activities at MAFB in support of operational missions created a number of waste sources of potential environmental concern. In 1982, the U.S. Air Force completed Phase I of the Installation Restoration Program investigation "to identify, confirm/quantify, and remediate problems caused by past management of hazardous wastes" at the base. Among the waste sources identified were 1) Zone 1 Landfills (comprised of Landfill Nos. 4, 5, and 6); 2) Landfill No. 2; 3) Landfill No. 3; and 4) the Defense Reutilization and Marketing Office. The four waste sources comprise only a portion of the site eligible for CERCLA investigation. Although only four waste sources are identified for listing on the National Priorities List at this time, any CERCLA eligible areas of concern, identified or unidentified at this time, and releases associated with those areas, comprise the site.

Phases of the IRP are currently ongoing at the MAFB, including Remedial Investigation and Site Inspection environmental sampling. Hazardous substances detected by analysis of surface soil, subsurface soil, waste, leachate, groundwater, and surface water/sediment samples collected include volatile organic compounds, polychlorinated biphenyls (PCBs), and inorganic hazardous substances. A release to surface water of nickel and mercury is documented. Sediment samples collected from wetlands immediately downstream of Landfill No. 2 contained high concentrations of nickel and mercury. In addition, Cookstown Pond, located near this area, is a known local fishing area.

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**OLD WILMINGTON ROAD GROUND WATER CONTAMINATION  
Sadsburyville, Pennsylvania**

The Old Wilmington Road Ground Water Contamination site is ground water contaminated with various volatile organic compounds (VOCs) located in the vicinity of Old Wilmington Road in Sadsburyville, Pennsylvania. The ground water plume was discovered during a U.S. Environmental Protection Agency (EPA) Site Inspection (SI) completed for the Perry Phillips Landfill site located along Old Wilmington Road in Sadsburyville. During the SI, 11 home wells were sampled. Laboratory results indicated that the Perry Phillips home well located on the site and other wells in the vicinity were contaminated with VOCs and manganese at significantly high levels. A well that provided water to the 60 residents of a mobile home park owned by Perry Phillips was found to be contaminated with trichloroethene (TCE). Subsequent sampling conducted by EPA, the Pennsylvania Department of Environmental Protection, and the Chester County Health department confirmed that VOCs were present at elevated levels.

Based on the results of a 1993 removal site assessment, EPA determined that there was an immediate and significant threat to human health due to the presence of elevated concentrations of VOCs in the drinking water supplies of residents living in the vicinity of the Perry Phillips Landfill site. Emergency CERCLA funding was made available in order to provide carbon filtration systems to residents in the area whose wells revealed contamination at levels of concern.

Three areas of high concentrations of VOCs were identified during a soil gas survey completed in the area by EPA in 1994. Two of these areas were on the Perry Phillips Landfill site and one was on an adjacent property. Two stone-filled trenches were discovered during test pit excavations on the adjacent property in an area where it is alleged that Joseph Phillips disposed of liquid industrial wastes. In 1998, a hydrogeologic analysis was completed in an attempt to determine the source of VOC contamination in the area of the plume. This analysis indicated that there may be an additional source of contamination at a property located along Old Wilmington Road, east of the Perry Phillips property.

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**STAR LAKE CANAL  
Port Neches, Texas**

The Star Lake Canal site is located in Port Neches, Texas, an industrial city adjacent to the Neches River in east Texas. The site consists of contaminated surface water sediments in the Jefferson Canal, Star Lake Canal, and Molasses Bayou. The Jefferson and Star Lake canals have received industrial wastewater and stormwater discharges from local chemical and other manufacturing facilities for a number of years. Although these discharges and other waste disposal activities likely account for the contamination found in the surface water sediments, to date, the Texas Natural Resource Conservation Commission (TNRCC) has been unable to identify one or more specific sources of the contamination.

In response to contamination discovered during dredging in the Jefferson Canal, TNRCC collected sediment samples in 1996 and 1998 from the Jefferson Canal, Star Lake Canal, and wetlands bordering the Molasses Bayou. TNRCC found elevated concentrations of chromium, copper, polynuclear aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs) in the canal sediments and elevated concentrations of copper, PAHs, and pesticides in the Molasses Bayou wetlands.

In the absence of a specific source of contamination, the Star Lake Canal site has been identified as an area of contaminated sediments. The contaminated sediments extend more than 2 miles, spanning portions of Jefferson Canal, Star Lake Canal, and the Molasses Bayou to within ¼-mile of where the Molasses Bayou, Star Lake Canal, and Neches River converge.

More than 3 miles of wetlands front the surface water in which contaminated sediments have been detected. These wetlands are habitats known to be used by the white-faced ibis, a State-designated threatened species. From the confluence of the Molasses Bayou, Star Lake Canal, and Neches River, surface water flows down the Neches River approximately 3½ miles to Sabine Lake. Sabine Lake is used as a fishery and produced more than 1 million pounds of fish and shellfish in 1996.

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**STATE ROAD 114 GROUND WATER PLUME  
Levelland, Texas**

The State Road 114 Ground Water Plume site consists of the contaminated ground water plume in the aquifer underlying the western boundary of the City of Levelland, Hockley County, Texas, approximately 31 miles due west of Lubbock. The ground water is primarily contaminated with 1,2-dichloroethane (1,2-DCA) and vanadium. Impacts from 1,2-DCA, vanadium, and/or metals contamination have been identified in 28 ground water supply wells, and a number of the City of Levelland's public water supply wells are in the immediate migration path of the ground water plume.

Contamination by 1,2-DCA was first detected by the Texas Department of Health in June 1990 in a sample collected from the Farmers Co-op Elevator Association well. Contamination by 1,2-DCA was again detected in this well the following year. Subsequent investigations by the Texas Natural Resources Conservation Commission (TNRCC) and EPA from 1995 through 1998 identified impacts from 1,2-DCA, vanadium, and/or metals contamination in 28 ground water wells in the area, including: 19 residential wells, five business wells, three City of Levelland public water supply wells, and one irrigation well. During these investigations, efforts were made to locate the source of the ground water contamination. Despite these efforts, however, no conclusive evidence was identified confirming one or more contaminant sources.

In the absence of a specific source of contamination, the State Road 114 Ground Water Plume site has been identified as a plume of contaminated ground water in the Ogallala Aquifer where 28 wells have significant levels of contamination. The plume extends from west to east (in the direction of ground water flow) along West State Highway 114 for approximately 1½ miles from the former Motor Fuels Corporation (MFC) property to the City of Levelland municipal park. The ground water plume is approximately a mile wide, bounded roughly by Ellis Road to the north and Houston Avenue to the south. Analyses of samples collected during site investigations to date indicate 1,2-DCA concentrations as high as 182 micrograms per liter (µg/l) and vanadium concentrations as high as 490 µg/l. EPA has established a maximum contaminant level (MCL) for 1,2-DCA in drinking water of 5 µg/l. No MCL currently exists for vanadium; however, the Superfund Removal Action Level for vanadium is 250 µg/l.

The Ogallala Aquifer is the principal source of drinking water for residents in Hockley County. Site investigations conducted by the TNRCC and the EPA to date have identified 15 wells contaminated with 1,2-DCA and vanadium, one well with 1,2-DCA only, and 12 wells with vanadium only. The Texas Department of Health has advised owners of the impacted wells that use of the well water is unsafe. EPA is partnering with the TNRCC to address the hazards posed by the use of this water and has initiated a program to install and maintain ground water filtration systems for these wells. Filtration units have been installed on 14 of the 16 wells contaminated with 1,2-DCA, including the Farmers Co-op Elevator Association well. The remaining two wells are not used for drinking water. Filtration systems have also been installed at three businesses where elevated levels of vanadium or metals contamination have impacted ground water quality.

The City of Levelland draws approximately one-third of its drinking water from the Ogallala Aquifer and obtains the remainder of its water supply from surface water sources. The city operates 17 public water supply wells, all of which are located downgradient and within 4 miles of the center of the ground water plume. The city's ground water wells serve 4,200 people of a total population of 14,000. Although 1,2-DCA contamination has not been detected in any of the active public wells to date, elevated levels of vanadium contamination have been documented in two of the city wells. A third public well was closed during the 1960s due to taste and odor problems. Contamination by 1,2-DCA has been detected in this well. Given their proximity and location in the immediate migration path of the ground water plume, all of the city's active public water supply wells are considered potentially susceptible to contamination.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**UPPER TENMILE CREEK MINING AREA  
Lewis & Clark County, Montana**

The Upper Tenmile Creek Mining Area is located in the Rimini Mining District, southwest of Helena, Montana, and consists of abandoned and inactive hard rock mines producing gold, lead, zinc, and copper. Mining began in the Rimini Mining District before 1870 and continued through the 1920s. Little mining has been performed in the Rimini Mining District since the early 1930s. The site may include the entire drainage basin (i.e., watershed) of Tenmile Creek and its tributaries that are upstream from five City of Helena drinking water intakes: Tenmile Creek; Beaver Creek; Moose Creek; Minnehaha Creek; and Walker Creek that serve an estimated 24,569 people in the City of Helena.

Several possible contaminant sources upstream from the Tenmile Creek drinking water intake include mining wastes at the following mines: Red Water Mine, Red Mountain Mine, and Tenmile Mine. Additionally, the Little Sampson, the Lower Evergreen, and the Avon Mill are all located on Tenmile Creek upstream of the Tenmile Creek drinking water intake. These mines were reclaimed during a 1989 reclamation project by the Montana Department of State Lands, Abandoned Mine Reclamation Bureau (MDSL/AMRB) (currently known as the Montana Department of Environmental Quality (DEQ), Mine Waste Cleanup Bureau); however, there may still be sources of hazardous substances in the Upper Tenmile Creek Mining Area.

Other tributaries of Tenmile Creek above drinking water intakes include Beaver Creek, Banner Creek, Monitor Creek, Ruby Creek, Minnehaha Creek, Moose Creek, and Walker Creek. There are several additional possible sources on these tributaries, including the mining wastes at the following locations: SE Section 13 Mine located on Monitor Creek, Armstrong Mine located on Minnehaha Creek, Beatrice Mine located on Minnehaha Creek, Monte Cristo Mine located on Ruby Creek, Monitor Creek Tailings Mine located on Monitor Creek, Peerless Group of mines and Peter Mine, both located on Banner Creek, and National Extension Mine located on a tributary to Beaver Creek.

Some mines in the Upper Tenmile Creek Mining Area that are downstream from any drinking water intakes include the following: Lower Tenmile Mine (Engstrom Mill); Valley Forge (Susie Lode); Upper Valley Forge; Little Lily; and Lee Mountain. At least 48 underground mines have been identified in the Rimini Mining District according to the MDSL/AMRB mine inventory database.

Tenmile Creek is a documented fishery. Finfish tissue samples have been documented to contain elevated levels of arsenic. Surface water and sediment samples have been documented to contain elevated levels of arsenic, cadmium, copper, lead, and/or zinc that are attributable to the mines.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**ALAMEDA NAVAL AIR STATION**  
**Alameda, California**

**Conditions at Proposal (May 10, 1999):** Alameda Naval Air Station's mission was to maintain and operate facilities and provide support services for fleet aviation activities of the U.S. Navy. Historically, the site was occupied by a borax processing plant, an oil refinery, and an airport for the city of Alameda. In 1930, the site was purchased by the U.S. Army. In 1936, the U.S. Navy acquired the site and in 1940, the site was officially commissioned. Currently, the site covers approximately 1,600 acres of dry land and 1,000 acres of submerged land on the island of Alameda, California. The eastern portion of the site is devoted to office space, residential housing, and industrial facilities. Runways and support facilities occupy the western part of the site. The facility was closed by the Navy in 1997.

The U.S. Navy's Initial Assessment Study identified 12 potential hazardous waste sources at Alameda Naval Air Station (NAS), four of which were ultimately recommended for further investigation. However, the California Environmental Protection Agency, Department of Toxic Substances Control (formerly known as the California Department of Health Services, Toxic Substances Control Division), identified 16 additional sources at the site in a Remedial Action Order to the U.S. Navy. Subsequently five more sources were also identified. Consequently, remedial investigation/feasibility study (RI/FS) activities are being conducted at 25 areas on site, including the West Beach Landfill.

The West Beach Landfill occupies approximately 110 acres in the southwestern corner of the site. Approximately seventeen of these acres are now marshland. The West Beach Landfill is bordered to the west and south by the San Francisco Bay, and to the north and east by runways. Materials reportedly disposed of in the northeast portion of the West Beach Landfill include polychlorinated biphenyl (PCB)-contaminated transformer oils, PCB-contaminated TAC rags, and carbonless paper containing PCBs. The southwest portion of the landfill was used for the disposal of PCB-contaminated dredge spoils, which for the most part came from Alameda Naval Air Station's pier areas, turning basin, and entrance channel. Analytical results of samples collected from the southwest portion of the landfill indicated the presence of PCBs up to 483.9 micrograms per kilogram.

Approximately 17 acres of marsh cover most of the southwest portion of the West Beach Landfill. Results of a preliminary wetland delineation study identified wetland hydrology, hydric soils, and hydrophytic vegetation (as outlined in the 1987 Corps of Engineer Wetland Delineation Manual) in the West Beach Landfill marsh. The West Beach Landfill marsh is dominated by pickleweed, an obligate wetland species.

Property which has been identified as uncontaminated at Alameda NAS by the Navy pursuant to CERCLA Section 120(h)(4)(a), which has received regulatory agency concurrence pursuant to 120(h)(4)(b), is not part of the NPL site. Parcel Numbers 39, 60, 63, 93, 101, and 194 were identified and concurred on as uncontaminated, and therefore, are not part of the Alameda NAS NPL site. If additional uncontaminated property at Alameda NAS is identified in the future and receives appropriate regulatory agency concurrence, it will not be considered part of the NPL site. By definition, the NPL site consists of locations where releases of hazardous substances have occurred. If information becomes available indicating that parcels previously thought to be uncontaminated are in fact impacted by hazardous substances, these releases will be considered part of the NPL site.

The NAS Alameda NPL listing is not intended to include the subsurface soil contamination layer known as the former marsh crust and subtidal area. This 1 to 2 foot thick layer of soil contaminated with polynuclear aromatic hydrocarbons (PAHs) is buried an average depth of 8 to 15 feet below ground surface throughout most of the facility. Currently, a feasibility study has been drafted for the former marsh crust and subtidal area, and EPA anticipates that an institutional control will be implemented to address this issue towards the end of 1999. Before the Navy can transfer portions of the base property that are otherwise clean, it must satisfy CERCLA 120(h) requirements for closing military bases. Any other hazardous substance releases from the facility are included in this NPL listing.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*



**EASTLAND WOOLEN MILL  
Corinna, Maine**

**Conditions at Proposal (April 23, 1999):** The Eastland Woolen Mill site (the site) consists of the mill property and areas where contamination has migrated or otherwise come to be located due to mill operations. The Eastland Woolen Mill property is a 21-acre parcel located on the north side of Main Street, Corinna, in central Maine. There is a 250,000 square foot Mill building, two dams, and several out buildings on site. The mill building straddles the East Branch of the Sebasticook River with one dam located under the building near main street; the other dam is located approximately 500 feet north of the mill and maintains the water level of Corundel Lake, a portion of the East Branch of the Sebasticook River. The two dams also create an on-site mill pond. The site is bordered to the north by Corundel Lake and residential property, to the south by Main Street, to the east by the Dexter Road and the Methodist Church, and on the west by Route 43 and several residential properties.

The original woolen-mill structure was built in the late 1800s or early 1900s. The property was a woolen mill as far back as 1912. EWM owned and operated the mill from 1936 to October 1996, when they closed the mill. EWM acknowledged that from the early 1960s to about 1971 it purchased and arranged for transport to its Corinna mill a dye aid chemical containing chlorobenzene. Eastland used this and similar chemicals in its wool production process, and discharged wastewater, containing spent chemicals, into the East Branch of the Sebasticook River, which flows under the mill.

In 1983, drinking water wells along Main Street in Corinna near the mill were found to be contaminated by volatile organic compounds (VOCs), primarily chlorobenzene compounds. An employee of the Maine Department of Environmental Protection (MEDEP) visited a Corinna restaurant (Garrison's), and found the water had a peculiar odor and taste. This led to sampling and analysis, which revealed that the restaurant water (from a bedrock well) was contaminated by chlorobenzene compounds above the maximum contaminant levels (MCLs). Corinna had no public water system until 1995; essentially all its citizens relied on private ground water wells for drinking water. By 1988, a total of 11 locations had chlorobenzene contamination at levels warranting the installation of granular activated carbon (GAC) filters. By November 1995 the Corinna Water District (which began construction in 1994) began supplying water to customers. In October 1996 EWM closed and its creditors sold its secured assets. In 1997, the Town of Corinna obtained title to the property as compensation for taxes owed.

In 1996, while the water district was installing a pipe across the bed of the East Branch of the Sebasticook River downstream of the mill, contamination was encountered. Eastland performed sediment sampling in the river downstream of the mill in 1996. In 1997, MEDEP collected additional samples of the riverbed downstream of the mill. The samples were analyzed on site with a mobile lab. Contamination was detected in the river sediments over a thousand feet downstream of EWM. MEDEP collected additional surface water and sediment samples in July 1998 that showed elevated levels of contaminants approximately 1,900 feet downstream of the mill. Three sources have been identified on site. The largest was a discharge from the dye kettles located in the wet process area of the EWM. Eastland discharged waste containing chlorobenzene compounds from the wool dying process into the river and onto the ground under the mill. The second source is an area of contaminated soil near the former underground storage tank (UST) area located adjacent to building 14 and Center Street. EWM reported that chlorobenzene was stored in a 7,600-gallon UST. The last source is the chemicals removed during a State emergency removal action. The action was initiated after the EWM closed and abandoned the facility with many hazardous chemicals still on the premises. Approximately 48,768 pounds of chemicals were removed from the site.

Contamination from the site threatens both the ground water and surface water near the site. Seventeen ground water wells with 113 users in downtown Corinna are contaminated with chemicals associated with the site. The original 11 wells impacted by the releases have been connected to the water system or no longer have a structure on the property. Since the water system was installed several other residential wells have shown low levels of contamination.

The East Branch of the Sebasticook River flows directly under the mill building and wastes were disposed directly into the river. The river supports many fisheries, wetlands and sensitive environments. Bald Eagles that nest north of the site are known to use the river near the site, and two Bald Eagle nests are located downstream of the site on Sebasticook Lake. There are also over 23 miles of wetlands along the surface water pathway and nine State wild life management areas.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**EMMELL'S SEPTIC LANDFILL  
Galloway Township, New Jersey**

**Conditions at Proposal (April 23, 1999):** The Emmell's Septic Landfill (Emmell's) site is an inactive site located on 38 acres in a rural residential area of Galloway Township, Atlantic County, New Jersey. It is bordered by Zurich Avenue to the north and woodlands to the south, east and west. The site is occupied by a vacant, fire-damaged, one story building and a garage. From 1967 to 1979, the site was operated as a septic and sewage sludge waste disposal facility. An April 1975 solid waste facility permit issued to Emmell's indicated that the site was to be used for the land application of septic and sewage sludge wastes. Violations of the permit noted that septic and sewage sludge wastes were being disposed of in trenches and lagoons. In addition to the permitted waste disposal operation, inspections at the site by officials from the State of New Jersey noted the presence of household garbage, tire piles, paint sludges, gas cylinders and construction/industrial wastes on the site.

From 1984 to 1988, ground water samples were collected from private residential drinking water supply wells in the vicinity of the site. Samples collected indicated the presence of organic hazardous substances. Based on the testing results, the Atlantic County Health Department recommended that the wells be closed. Subsequently, the contaminated drinking water wells were closed and deeper water supply replacement wells were drilled.

Ground water investigations were conducted at the site by both Galloway Township and the New Jersey Department of Environmental Protection (NJDEP) in 1996. The NJDEP drilled monitoring wells at three locations in March 1996. Consultants for the township installed seven monitoring wells across the site between June and October 1996. Subsequent sampling of the monitoring wells and chemical analysis of the samples documented the observed release to ground water of organic hazardous substances.

EPA completed a Site Activity Investigation of the Emmell's property in 1998. The Site Activity Investigation included the installation of monitoring wells and the collection of soil boring, test pit, and ground water samples. Chemical analysis of the samples indicated the presence of organic hazardous substances at levels significantly above background conditions in the subsurface soil. Additionally, waste materials (i.e., paint like materials, charred materials, and sludges) were observed in the subsurface. Analysis of the waste materials identified elevated levels of organic and inorganic hazardous substances. The analysis of the ground water samples collected documented an observed release to ground water of organic hazardous substances.

The organic hazardous substances detected in the ground water samples collected from the closed private residential supply wells were either the same or degraded products of the hazardous substances found in the soils and ground water at the Emmell's site. The closed supply wells are situated downgradient of the site.

The Emmell's site overlies the Cahansey Sand Aquifer. Within four miles of the site residents obtain their drinking water supply from private and public (i.e., municipal, school, etc.) well water sources. A total of eight public water supply wells are currently operating within the target distance limit. No resource uses or wellhead protection areas have been identified within four miles.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*



## NATIONAL PRIORITIES LIST (NPL)

July 1999

OSWER/OERR

State, Tribal, and Site Identification Center

Washington, DC 20460

**FORMER NANSEMOND ORDNANCE DEPOT  
Suffolk, Virginia**

**Conditions at Proposal (January 19, 1999):** The Former Nansemond Ordnance Depot (NOD) is located on a former 975-acre U.S. military facility at the northwestern end of State Route 135. The former NOD property was bordered to the west by the Nansemond River, to the north by the James River (Hampton Roads), to the east by Streeter Creek, and to the south by commercial and light industrial areas. Portions of the former NOD property are currently occupied by the Portsmouth Campus of Tidewater Community College (TCC), General Electric Company, and Dominion Lands, Inc. EPA's Superfund Program currently maintains an interest in releases from the seven waste sources listed below and in other selected areas of concern.

The facility was obtained by the United States Army between 1917 and 1929, and was known as Pig Point Ordnance Depot until 1929. During World Wars I and II and the intervening years, the depot was used for various activities related to the preparation, processing, storage, shipment, salvage, reconditioning, and disposal of ammunition. It was apparently used after World War II in demobilization, including dumping explosives, ammunition, and chemicals.

The depot was operated by the Navy as the Marine Corps Supply Forwarding Annex from 1950 to 1960, when it was declared excess. The Beazley Foundation operated a private boys military academy at the site from 1960 to 1968. Since 1960, portions of the site have also been conveyed to the various current property owners listed above. Interstate 664 was constructed through the site in the early 1990s.

In the late 1980s, it was determined that bulk explosives, a several-ton slab of crystalline trinitrotoluene (TNT), small arms munitions, and other ordnance items, both spent and unexploded, had been disposed in a 2- to 3-acre area adjacent to College Drive. Between November 1988 and June 1992, over 330 tons of contaminated soil and miscellaneous ordnance were removed from this area.

Seven waste sources have been evaluated: residual soil contamination at the removal area, a surface impoundment (the "steamout pond") and soil contamination near Park Drive, a waste pile near TCC lake, and landfills along the James River beach front, in the impregnation kit (XXCC3) area, and in the horseshoe pond area. Hazardous substances found in these waste sources include metals, nitroaromatics (explosives), volatile organic compounds (VOCs), and semivolatile organic compounds (SVOCs). Other areas of concern located on the former NOD - such as explosive magazine lines, burning grounds, disposal pits, and off-shore dumping areas - are possible sources of these same types of contaminants.

Nitroaromatics and lead have been released to ground water. TCC utilized on-site production wells as a source of drinking water until 1997, when a hookup to the City of Suffolk municipal water system was completed. The TCC wells were located immediately downgradient of the known ground water contamination, and TNT was detected in one of the wells in 1990. Metals, TNT, and SVOCs have been released to sediments along the James River beach front, where recreational fishing takes place. Sensitive wetland areas on and near the site are also potentially threatened.

Two areas that have been considered during the listing process are a triangular parcel owned by the Commonwealth of Virginia and used as an excess property area and a rectangular parcel that belongs to Dominion Lands, Inc. (Source 3, Impregnation Kit Area). Analytical results of samples collected at the triangular property did not reveal contamination that would warrant a response action. The rectangular parcel, identified as Source 3 in the HRS Documentation Record, has undergone extensive removal activities and EPA anticipates that confirmation sampling at this location will indicate that this area is also not of concern to EPA. If the analytical results for the Source 3 area are as expected, there will be no need to address this area under any agreement that EPA may reach with the U.S. Army Corps of Engineers concerning the cleanup of the former NOD.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**HANLIN-ALLIED-OLIN**  
**Moundsville, West Virginia**

**Conditions at Proposal (April 23, 1999):** The Hanlin-Allied-Olin site is an inactive chemical manufacturing plant located 2.5 miles south of Moundsville, Marshall County, West Virginia. The site is currently owned by three parties: Hanlin/LCP Chemicals, Allied Chemical Corporation, and Olin Corporation. The site includes a 135-acre North Plant owned by Allied and Olin, and a 225-acre South Plant owned by Hanlin. Two areas included in the 360 acres are not considered part of the NPL site because they are being addressed under other authorities. One of these areas, the "Brownfields" portion, is being addressed through the West Virginia Department of Environmental Protection's Voluntary Remediation and Redevelopment Program. The second area, the "Engineering Evaluation/Cost Analysis (EE/CA)" or "Olin Process Area" portion, is being addressed through EPA's Removal Program. The NPL site therefore includes the entire Hanlin-Allied-Olin property less these two areas. Ground water beneath the entire 360-acre Hanlin-Allied-Olin property will be addressed as part of the NPL site, as will any off-site migration of contamination via ground water, surface water or air migration.

The site (i.e., the entire 360-acre property) is bordered by the Ohio River to the north and west, West Virginia Route 2 to the east, and a golf course to the south. Access is restricted by the river and by a chain link fence and security guard. The site is directly underlain by an unconsolidated alluvial aquifer. The alluvial aquifer that underlies the site supplies drinking water to about 2,900 people.

Operation on the northern portion of the site included the manufacture of toluene diisocyanate (TDI), methylene dianiline, and hydrochloric acid, and included waste disposal areas on both North and South plants.

Operations on the southern portion of the site included the production of chlorine and sodium hydroxide by electrolytic mercury decomposition in mercury cells in saltbrine and chloromethane by reacting methanol with anhydrous hydrochloric acid.

Sources on the site include surface impoundments, landfills, waste piles, container storage areas, contaminated soil, and outfalls. Hazardous substances contained in the five evaluated waste sources include mercury, methylene chloride, chloroform, carbon tetrachloride, tetrachloroethene, trichloroethylenene, and 1,1,2-trichloroethane. All of these substances, as well as other related substances, have been detected in ground water in the alluvial aquifer. Mercury, chloroform, and carbon tetrachloride have been released to the Ohio River through National Pollutant Discharge Elimination System (NPDES) Outfall 001 at concentrations exceeding permit limitations or through spills to Outfall 001. A 1981 State Consent Decree ordered Allied to pump onsite wells on the northern (now Allied and Olin) and southern (now Hanlin) properties for 20 and 14 years, respectively, or to otherwise prevent the offsite migration of contaminants in the ground water. The site is not eligible for RCRA Corrective Action for various reasons relating to ownership, permit dates, and financial solvency.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**HART CREOSOTING COMPANY**  
**Jasper, Texas**

**Conditions at Proposal (April 23, 1999):** The Hart Creosoting Company site encompasses approximately 8.8 acres located along the west side of State Highway 96 in the southwest portion of the City of Jasper, Jasper County, in southeast Texas. The Hart Creosoting Company site is an inactive former wood treating facility that operated from 1958 to 1993. During its history, a pole peeling plant also operated at the facility from 1968 to 1978 and pipe threading operations were conducted at the facility from 1982 to 1985.

The U.S. Environmental Protection Agency (EPA) and the Texas Natural Resource Conservation Commission (TNRCC) conducted numerous investigations of the Hart Creosoting Company site both during the facility's operations and after its closure. In March 1994, 10 months after the facility ceased wood treating operations, an expanded site inspection (ESI) of the facility was conducted. Soil samples taken during the ESI showed that soils throughout the facility processing area were contaminated with polycyclic aromatic hydrocarbons (PAHs), which are hazardous substances associated with the wood treating industry. Subsequently, ground water samples collected around the site and sediment samples collected from an intermittent creek draining the site and the nearby Big Walnut Run Creek were found to contain elevated concentrations of the same hazardous substances found in the soil on site.

The contaminated ground water is located in an aquifer that is used as a primary source of drinking water for the City and County of Jasper. Thirty-nine private wells and two public water supply wells are located within four miles of the site. No public or private ground water wells are known to be impacted at this time. The area of Big Walnut Run Creek where contamination has been found is used by area residents for swimming and subsistence fishing. While contamination has been detected in both the ground water and the surface water near the site, only the surface water contamination is reflected in the Hazard Ranking System score developed for the site.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**HUDSON REFINERY  
Cushing, Oklahoma**

**Conditions at Proposal (April 23, 1999):** The Hudson Refinery site is located in Cushing, Payne County, Oklahoma. Surrounding the site are residential properties to the east and west, and residential and agricultural land to the north. Commercial properties are located to the south. Highway 33 (Main Street) separates the site into a "north" and "south" refinery.

Historical aerial photographs indicate that the site operated as a refinery beginning as early as the mid-1930s. Little is known about the operations or waste management practices of the facility prior to 1977, although the aerial photographs show process areas and tank farms. Refining operations ended in 1982 and the site was abandoned. The majority of the tanks have been removed from the tank farm areas. Some tanks, however, have been partially salvaged, compromising tank integrity, and many of the remaining tanks contain residual materials.

EPA identified six sources of contamination at the site during a 1998 removal assessment and a 1998-1999 expanded site inspection. The north and south refineries contain a 10-acre land treatment unit, a tank which contained 6,000 gallons of hydrofluoric acid, two areas of contaminated soil, storage tanks containing tetraethyl lead, and several other storage tanks. During a December 1998 emergency removal action, EPA transferred the 6,000 gallons of hydrofluoric acid into stable containers (which remain on the site) pending disposal under a removal action. Approximately 3.4 miles of piping and 96 vessels that may still contain hydrofluoric acid are located on the site.

Elevated levels of chromium, mercury, polynuclear aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs), as well as pure hydrofluoric acid and tetraethyl lead, were detected in the sources at the site. Elevated levels of chromium and mercury also were detected in wetlands associated with a former biotreatment pond at the site.

On March 4, 1999, the Agency for Toxic Substances and Disease Registry (ATSDR) issued a public health advisory for the Hudson Refinery site because of the immediate threats to public health posed by hydrofluoric acid and tetraethyl lead, as well as asbestos, found at the site.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**KIM-STAN LANDFILL**  
**Selma, Virginia**

**Conditions at Proposal (April 23, 1999):** The 24-acre Kim-Stan Landfill is located in Alleghany County, a predominately rural county of west central Virginia. The landfill is situated in a mixed commercial/residential area of Selma, Virginia. The unlined landfill, which has been inactive since 1990, lies along the southern edge of VA Route 696, approximately 1,000 feet south of the Jackson River. The landfill is bordered on the east by the Bennett Lumber Company and on the west by property formerly used by another lumber company. Across VA Route 696 lies the historic Oakland Church, CSX Railroad property with associated wetlands, and a string of ox-bow "ponds" which drain into the Jackson River.

A large volume of surface water runs onto the landfill from the Rich Patch Mountains south of the landfill. The lack of any substantial surface water runoff and leachate containment has been and continues to be a major problem at the Kim-Stan landfill. During large rain events, storm water runoff from the Kim-Stan landfill has drained northward as sheet flows and frequently flooded the highway on the northern border of the landfill, carrying runoff onto the Oakland Church and CSX Railroad properties, wetlands, and ox-bow "ponds." Sampling results indicate that hazardous substances from the landfill have contaminated nearby wetlands and the ox-bow "ponds," which the public uses as a fishery.

The Kim-Stan Landfill operated as a sanitary/industrial landfill for almost twenty years, reportedly received approximately 865,000 tons of waste between November 1972 and May 1990. Depth of the waste buried at the landfill has been estimated at over 80 feet thick. Wastes known to have been disposed of at the landfill include 5,000 gallons of waste oils contaminated with polychlorinated biphenyls, and unknown quantities of aluminum sludges containing mercury, asbestos, and medical waste. Backhoe test pit data and information collected by local citizens indicate that landfilled wastes were derived from a wide range of sources, including hospitals, light industrial plants, manufacturing plants, automobile repair shops and dry cleaners.

While the landfill was in operation, the owner/operators undertook several measures to attempt to address surface runoff and leachate inflow. None of the measures taken to contain leachate with the boundary of the landfill was successful. During the summer of 1989, a 400,000-gallon storage basin was constructed on top of the refuse to replace the two buried 4,000-gallon steel tanks that had proved inadequate to contain the large volume of leachate being generated at the landfill.

Beginning in 1982 a number of organizations, including EPA Region III and the Commonwealth of Virginia, have collected environmental media samples to assess the surface water runoff and leachate problem at the landfill. These sampling results provide evidence that hazardous substances are migrating from the landfill into the environment. Both ground water and surface water are being contaminated. The July 1997 SI sampling results show that wetlands in the area south of the CSX Railroad culvert contained elevated levels of barium and zinc. Wetlands in the ox-bow ponds also are being impacted by contamination from sources at the landfill. Cadmium was found in the pond nearest to the landfill at a concentration above environmental benchmarks. At other sampling locations within the ponds area, cadmium as well as aluminum, barium, manganese, and zinc were found to be elevated over background levels. Cadmium and zinc are of special concern because these metals tend to bioaccumulate within edible fish.

The landfill was shut down by court order on May 11, 1990. When operations ceased, the active part of the landfill remained uncovered. The thickness of the soil cover over the rest of the landfill generally did not exceed 6 inches. Although the Commonwealth of Virginia has undertaken several measures since 1990 to improve conditions at the landfill, the significant quantity of surface runoff and leachate discharge still continues to pose environmental concerns.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**MARTIN AARON, INC.**  
**Camden, New Jersey**

**Conditions at Proposal (April 23, 1999):** The 2.4-acre Martin Aaron, Inc. site is located at 1542 South Broadway in a mixed industrial and residential section of Camden, New Jersey. Various companies, including Martin Aaron, Inc., used the site for drum recycling for approximately 30 years. Historically, Kifferty Morocco Manufacturing Co. operated a tannery at the site from 1887 until 1908. Castle Kid Company purchased the property at that time and manufactured glazed leathers until the City of Camden seized the property for tax delinquency in 1940. Benjamin Schmerling bought the property in 1940 and leased portions to H. Preston Lowden Co. for wool and hair blending and to American Chain and Cable Company - PA Lawnmower Division for manufacturing. Martin Aaron, Inc. purchased the property in 1969, and operated a drum reconditioning facility until 1985 under the name Drum Service of Camden. At that time, Martin Aaron, Inc. sold the business to a corporation jointly owned by Westfall Ace Drum Company (Wadco) and Rhodes Drum Co.. Wadco occupied the majority of the facility and ceased operating in March 1995. Rhodes Drum Co. operated at the building near the southeast corner of the site until they ceased operations around end of 1998. It is reported that a trucking company currently uses the property for the storage and transfer of trailers. Martin Aaron, Inc. still owns the property.

Numerous areas of concern have been identified at the site. The processing rooms, where drums were drained, pressure-washed with caustic solution, and rinsed, are major areas of concern. The residues were collected in four sewer basins. The basins were allegedly designed to discharge wastewater after pH adjustment to the combined sanitary/storm sewage system, however, it is suspected that some of the effluent discharged directly to the subsurface. There was a baghouse for dust collection from drum sandblasting and a paint booth where oil-based paint was applied. Various aboveground and underground storage tanks were associated with the site processes. The outdoor paved and unpaved portions of the property were used for drum storage. Leaking roll-off containers and drums have been observed on site. Reports indicate that holes were dug throughout the property for the disposal of wastes, and that liquid and solid wastes and 200 to 1,000 containers of waste were buried on the property. New Jersey Department of Environmental Protection (NJDEP) has confirmed the reports of disposal, observed buried drums of hazardous waste and found contaminated soils at depths below the water table. NJDEP reports that chemical wastes were illegally deposited on the site in March 1999. Sampling events conducted by the NJDEP between 1986 and 1998 identified volatile organic compounds (VOC) and inorganic constituents in site sewer basins and drums. Inorganic constituents found at high concentrations in the sources included arsenic, cadmium, mercury, selenium, barium, chromium, and lead. The same VOCs and inorganic contaminants have also been detected in soils throughout the property and from depths of 0 to 8 feet. The highest concentrations were detected near the drum processing areas where the sewer basins are located.

The aquifer of concern and the most productive source of groundwater in Camden is the Potomac-Raritan-Magothy (PRM) aquifer system, which consists of three unconsolidated water-bearing units. There is hydraulic interconnection vertically throughout the PRM aquifer system in the Camden area. Analytical data from on-site monitoring wells and direct-push groundwater samples document observed releases of 1,2-dichloroethene to the lower portion of the Magothy Formation, approximately 50 feet below ground surface. Public-supply wells tapping the PRM aquifer system within 4 miles of the site provide water to approximately 105,000 persons. The nearest of these wells is a Camden City well located approximately 1.75 mile to the east-northeast.

Odors emanating from the site have been noted dating back to April 1980. Solvent-type odors were noted during NJDEP inspections and off-site reconnaissances in 1986 and 1988. The odors have been observed to be strongest in the areas of the sewer basins and are believed to have originated from drum cleaning operations. NJDEP issued a Notice of Violation in August 1983 for a negligent release of hydrogen chloride gas from improperly closed drums. EPA issued a Notice of Violation in October 1987 for excessive volatile organic emissions from painting/coating operations.

The site is currently used by 1 or 2 employees of a trucking company. There are approximately 450,000 residents, 234 acres of wetlands, and three endangered species habitats within 4 miles of the site.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*



**MOUNTAIN PINE PRESSURE TREATING  
Plainview, Arkansas**

**Conditions at Proposal (April 23, 1999):** The Mountain Pine Pressure Treating site (also known as the Plainview Lumber site) consists of three related contiguous facilities situated on 95 acres. The three facilities are Mountain Pine Pressure Treating, Inc., Plainview Lumber Company, and CCA Treatment Plant (CCATP). Mountain Pine Pressure Treating is a subsidiary of Plainview Lumber Company and treated timber with pentachlorophenol (PCP) and chromate copper arsenate (CCA) from 1965 to 1981. The CCATP facility was operated by the Plainview Lumber Company from 1980 to 1986 and for a brief period in the summer of 1989.

The Mountain Pine Pressure Treating waste management system consisted of PCP and CCA drip tracks, a recovery holding pond (RHP), PCP and CCA treatment cylinders, a spray evaporation pond (SEP), and an oil separator. During operations, the treated lumber was placed on the drip tracks and the excess solution was allowed to drain onto the tracks. The area between the drip tracks and the RHP is sloped toward the RHP. The oil separator, located between the drip tracks and the RHP, separated PCP oil from the excess solution. The liquid remaining after PCP oil was removed was discharged into the RHP. When the RHP was full, the excess water was pumped to the SEP via an above ground pipeline. In 1987, the dike surrounding the RHP was breached allowing wastewater and sludge containing PCP and CCA to enter the adjacent drainage ditch, Porter Creek, and wetlands along the creek.

A Site Inspection was conducted by the EPA Region 6 Field Investigation Team (FIT) in June 1988. FIT collected soil, sediment, surface water, ground water, asbestos, and air samples. Chemical analysis of the samples revealed the presence of wood treating chemicals (PCP, chromium, copper, and arsenic) in several locations on site and off site in Porter Creek and adjacent wetlands.

An Expanded Site Inspection was conducted by FIT in May 1991. On-site source samples were collected from the RHP, SEP, two drainage ditches, lumber storage area, and CCATP. Elevated concentrations of wood treating chemicals (PCP, chromium, copper, arsenic) were detected in soil, sediment, and water samples collected from the RHP, SEP, two drainage ditches, lumber storage area, CCATP, Porter Creek, and adjacent wetlands.

Porter Creek is a major tributary of Lake Nimrod and contains a designated wetland. Lake Nimrod contains an intake that supplies drinking water for the City of Plainview, and is used for flood control, fishing, hunting, boating, and camping.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**NORFOLK NAVAL SHIPYARD  
Portsmouth, Virginia**

**Conditions at Proposal (March 6, 1998):** The Norfolk Naval Shipyard (NNSY) is the oldest continuously operated shipyard in the United States, with operations dating to 1767. Lying along the Southern Branch of the Elizabeth River, near the mouth of Chesapeake Bay, the shipyard is centrally located in the tidewater region of southeastern Virginia. Fisheries, wetlands, and other sensitive environments are located downstream from the site.

Activities conducted at the shipyard include metal forming, repair and installation of mechanical and electrical equipment, metal fabrication, metal plating, and painting operations. Industrial shops at NNSY generate a wide variety of industrial wastes, often in large quantities. Wastes generated include scrap metal; waste oils such as hydraulic oils, cutting oils, and oils contaminated with polychlorinated biphenyls (PCBs); spent cleaners and solvents; paint and paint sludges; thinners; residues from sandblasting; asbestos; battery electrolytes; plating wastes; and solutions from cleaning boilers.

In the past, wastes generated at NNSY by waterfront maintenance of naval vessels frequently were either dumped overboard or onto the ground. In addition, before the shipyard began using the industrial waste treatment plant (IWTP) in 1979, numerous industrial wastes from shops at NNSY were routed to storm drains and discharged without treatment to the Southern Branch of the Elizabeth River. The storm sewer system, which drains all areas of the shipyard, is independent of the sanitary sewer system and discharges to the Southern Branch of the Elizabeth River at more than 75 locations.

Other industrial wastes generated at NNSY that were not suitable for reuse or reclamation were disposed on site. Historically, waste disposal areas at NNSY were located in the southern portion of the shipyard. As the shipyard grew, land disposal areas gradually were located farther to the south, until such areas became concentrated in their current locations. Space limitations have prevented large-scale waste disposal in other areas of the facility. Wastes that have been landfilled at NNSY include spent blasting grit, sludge from the IWTP, and fly and bottom ash. The following six sources are evaluated in the Hazard Ranking System documentation record, primarily for documented releases of highly persistent hazardous substances to surface water: Scott Center Landfill, Sanitary Landfill, Chemical Waste Pits, Hydraulic Fill Area, Bermed Chemical Disposal Area, and Acetylene Waste Lagoon.

Five of the six sources evaluated are located along or near Paradise Creek. Analysis of samples of sediments in Paradise Creek collected in 1986 and 1992 detected the presence of semivolatile organic compounds (SVOCs), pesticides, PCBs, and metals in reaches of the creek adjacent to the sources evaluated. The sixth source evaluated is located approximately 100 feet from the Southern Branch of the Elizabeth River.

The following areas are currently of concern to EPA: the Main Shipyard area, Paradise Creek Disposal Area, Southgate Annex, Scott Center, and New Gosport housing area. Two areas identified in the proposed NPL listing of the Norfolk Naval Shipyard are not part of this NPL listing: St. Julien's Creek Annex and St. Helena Annex. St. Julien's Creek Annex is being evaluated as a separate NPL site. The Navy has recently completed extensive assessment and cleanup at 16 acres of the St. Helena Annex that indicates that most of the St. Helena Annex is not contaminated at levels of concern to EPA. One small area of groundwater contamination was identified at St. Helena Annex. The Navy has agreed to work closely with EPA to address this and any other contamination found at the St. Helena Annex. Although this property is not considered part of the Norfolk Naval Shipyard NPL site, all future assessment and cleanup of St. Helena Annex will be addressed in the enforceable Norfolk Naval Shipyard Federal Facilities Agreement.

A recent Navy investigation uncovered erosion at the New Gosport Landfill, ½ mile west of the Scott Center Landfill, which may impact Paradise Creek, and, therefore, is of concern to EPA.

With respect to the Stanley Court Housing Annex, located approximately one mile southwest of NNSY, there are no known possible sources at this location.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**NORTH BELMONT PCE**  
**North Belmont, North Carolina**

**Conditions at Proposal (April 23, 1999):** The North Belmont PCE site is located in a residential neighborhood on Woodlawn Avenue in North Belmont, Gaston County, North Carolina. The site consists of the surrounding residential neighborhood and the former locations of two dry-cleaning operations: the former Untz's dry cleaners located at Roper's Shopping Center and the former dry cleaners located at the intersection of Acme Road and Suggs Road. The dry cleaning establishment at Roper's Shopping Center was operated by the Untz family from 1960 to 1975. Prior to that, the Untz dry cleaning operation was located at Acme and Suggs Roads. These two locations are believed to be the sources of a plume of ground water contamination that extends north and east of the Roper Shopping Center and has impacted several nearby residential wells with tetrachloroethylene (PCE), trichloroethylene (TCE), and 1,1-dichloroethylene (1,1-DCE).

In February 1991, the Gaston County Health Department sampled a well that provided water to the North Belmont Elementary School and two single family dwellings as part of an effort to evaluate the extent of volatile organic compound (VOC) contamination in community water supplies. VOC contamination was detected in the wells. The US EPA Region IV Emergency Response and Removal Branch (ERRB) was notified of the situation and ERRB collected additional samples on March 1, 1991. ERRB and Gaston County Health Department collected approximately 25 drinking water samples from residential wells in the neighborhood. PCE and/or its breakdown products were detected in 16 of the samples. As a result, 29 of the neighborhood drinking water wells were taken out of service and connected to the Belmont city water service.

During a subsequent Site Inspection (SI) conducted by the North Carolina Superfund Section in 1993, efforts were made to locate the source of the contaminated ground water plume. No conclusive evidence was collected to identify a contaminant source. A Remedial Investigation (RI) was conducted at the site from June 1996 through October 1996 by the US EPA Region IV Hazardous Waste Section. The vertical and horizontal extent of the contaminated ground water plume was delineated within a distance of one half mile north and east of the Roper Shopping Center. The remaining unsampled residential wells in the neighborhood were also sampled as part of the RI. Elevated concentrations of PCE, TCE, and 1,1-DCE were identified in five additional residential wells in the surrounding neighborhood. Although samples were collected during the RI in an attempt to locate the source(s) of ground water contamination, no source(s) could be definitively identified.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**UNITED STATES AVENUE BURN  
Gibbsboro, New Jersey**

**Conditions at Proposal (September 29, 1998):** The United States Avenue Burn site is situated in the vicinity of United States Avenue, Gibbsboro, New Jersey. The three sources, the Burn Area, the Burn Landfill, and the Railroad Track, are located on contiguous properties east of Bridgewood Lake in Gibbsboro. The source areas are within the Cooper River drainage basin and the White Sand Branch and Haney Run streams flow across the site into the Bridgewood Lake.

From the mid 1800s to 1967, John Lucas & Company operated a paint manufacturing facility at a separate location in Gibbsboro. The Lucas manufacturing operations were acquired by the Sherwin-Williams Company in 1967, who operated the facility until its closure in 1977. The Burn Area source was used as disposal and burn site for paint wastes generated at the manufacturing facility. Reports indicate that paint wastes and solvents were dumped and/or poured onto the ground surface at the source location and then burned. The Burn Landfill was used for the disposal of paint wastes, municipal waste and the storage of sludges generated from the former paint manufacturing facility's wastewater treatment plant. During investigations of the Burn Area and Burn Landfill sources, representatives from the U.S. Environmental Protection Agency (EPA) notified the Sherwin-Williams Company of the existence of discolored soils along a section of the Railroad Track. Subsequent investigations confirmed the presence of paint wastes disposed of at the location of the Railroad Track source.

The initial investigation of the site was conducted by the New Jersey Department of Environmental Protection in May of 1994. Samples of paint waste, soil and sediments noted contamination at the source locations and documented a release to sediments in the White Sand Branch. In response to these findings, Sherwin-Williams installed a fence around the visible waste associated with Burn Area source. A wetlands delineation performed for the installation of the fence concluded that part of the Burn Area source is situated in wetlands. In September 1995, the EPA entered into an Administrative Order of Consent agreement with the Sherwin-Williams Company to perform a Removal Action Investigation of the U.S. Avenue Burn Site. Paint waste, soil, surface water and sediment samples were collected from numerous locations across the site to characterize the extent of contamination. Inorganic hazardous substances were detected at concentrations significantly above background levels in waste, soil and sediment media sampled from the site. The presence of the Burn Area source within wetlands and analytical results of sediments samples collected downstream of the source, documented the actual contamination of wetlands and a sensitive environment.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**VASQUEZ BOULEVARD AND I-70  
Denver, Colorado**

**Conditions at Proposal (January 19, 1999):** The Vasquez Boulevard and I-70 site covers an area of approximately 456 acres of contaminated soil in northeast Denver, Colorado. The site encompasses an area situated in the Northern and Central portion of the City and County of Denver, and extends north into Adams County, Colorado.

Historically, this area was a major smelting center for the Rocky Mountain west, receiving ore from as far away as Mexico and British Columbia. Three smelting plants, Omaha-Grant, Argo and Globe all operated in this area from the 1870's through the 1950's, refining gold, silver, copper, lead, and zinc. The Omaha-Grant smelter, located nearest and just west of the area of contaminated soil, is believed to be the primary contributor to the contamination.

On July 16, 1997, the Colorado Department of Public Health and the Environment (CDPHE) collected 25 soil samples from the residential yards in the Elyria and Swansea neighborhoods of Denver, situated to the north of the elevated portion of Interstate 70, to determine if a threat to human health existed in the area due to historical smelting operations. Analysis of the 25 soil samples indicated elevated levels of arsenic, cadmium, and lead. The discovery of these contaminants prompted the need to further investigate the extent of arsenic, cadmium and lead present in soils of North Denver. An extensive soil sampling program was conducted in April, 1998, and included the collection of 3,550 samples from parks, schools, and residences in the area. All samples were screened for contamination in the field and approximately 10 percent were sent for confirmatory laboratory analyses.

An evaluation of residences within the area of contaminated soil indicates that there are an estimated 95 residences subject to arsenic concentrations exceeding health-based benchmarks, 14 additional residences where elevated levels of lead have been detected, and another 750 residences where, though not detected, contamination can be inferred based on the presence of contamination at nearby properties.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

**VEGA BAJA SOLID WASTE DISPOSAL**  
**Vega Baja, Puerto Rico**

**Conditions at Proposal (April 23, 1999):** The Vega Baja Solid Waste Disposal (VBSWD) site is located in the Rio Abajo Ward, Vega Baja, Puerto Rico. The site is an inactive dump located on approximately 15 acres of land. The Vega Baja Municipality borrowed the land from the Puerto Rico Land Authority in 1948 and utilized the property and an unlined, open burning dump for institutional, commercial, and industrial wastes until 1978. There are currently more than 206 residential dwellings constructed on an 11-acre portion of the site.

In May 1994, the Puerto Rico Environmental Quality Board (PREQB) collected surface soil samples near several of the residential dwellings as part of a Site Inspection. Lead and copper were detected in the samples at elevated concentrations. In June of 1996, an Expanded Site Inspection (ESI) of the VBSWD site was conducted by the PREQB and EPA's Superfund Technical Assessment and Response Team (START), which included the collection of surface and subsurface soil samples as well as sampling of ground water from public and private water supplies. The results of the ESI documented the presence of contaminated soil across the surface of the site and within 200 feet of three residential homes. The soil is contaminated with inorganic hazardous substances. The ground water samples collected during the ESI did not detect the presence of hazardous substances at concentrations significantly above background conditions. The environmental sampling conducted during the ESI was performed in accordance with EPA sampling methodologies and analyzed at an EPA Contract Laboratory Program (CLP) laboratory. The data have been validated according to EPA CLP Region II protocols.

In June 1998, START collected ground water samples from three monitoring wells, a U.S. Geological Survey (USGS) observation well, and three public water supply wells situated in the site vicinity. Hazardous substances were not detected in the ground water samples collected. In June 1998, the EPA Removal Action Branch conducted additional environmental sampling at the site (i.e., subsurface soil investigation).

The site is situated on a limestone upland containing the outcrop areas of the Aymamon Limestone, the Aguada Limestone, and the Cibao Formation, all of which contain karst aquifers that have been developed for public supply. The formations consist of heavily weathered limestone that ranges in texture from chalky to fossiliferous to crystalline. Topographic features such as mogotes (limestone hills) and dolines (sinkholes), solution cavities, and evidence of solution channels exist near the site, all typical of karst terrain. Blanket sands and alluvium deposits, consisting primarily of brownish-red soil, overlie the limestone bedrock, although not continuously within the site vicinity.

Seventeen active Puerto Rico Aqueduct and Sewer Authority (PRASA) wells exist within the target distance limit, the closest of which lies 0.70 mile east-northeast of the site. These wells provide drinking water to over 70,000 people, and may potentially be affected by the migration of contaminants from the site in ground water through the highly permeable karst aquifers from which most of these wells draw. No containment measures (i.e., cover, liner, etc.) are known to have been used at the site that could prevent such migration.

**Status (July 1999):** EPA is considering various alternatives for this site.

*[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]*

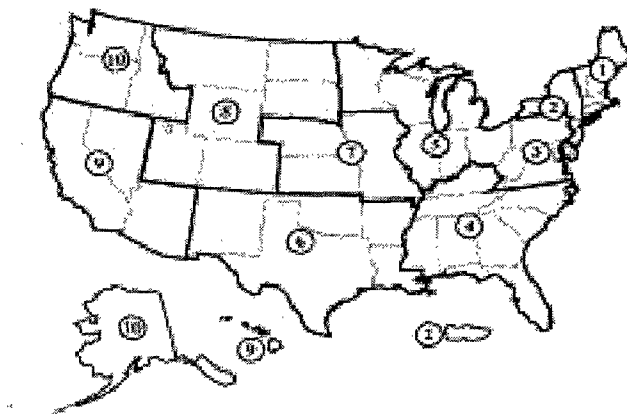
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